

Work Order ID 162122

Friday, May 26, 2017 10:39:22 AM

162122

Page 1

Item ID: D5321-3 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Ring
 Start Date: 5/29/2017 Start Qty: 40.00 ***40*** Cust Item ID:
 Required Date: 6/19/2017 Req'd Qty: 40.00 ***40*** Customer:

Reference: DAS
 Approvals: Process Plan: 9-89 Date: MAY 26 2017 Tooling: Date: Run Start ***NR1***
 QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D5321	B

100 0.00
100
 Purchasing Memo 0.00
 Purchasing Issue P/O: 36456
 Possible supplier: ANCRA
 Supplier P/N: 48557-11
 C of C is required.

40 MAY 26 2017 DAS 13
 9-89

110 0.00
110
 Packaging Memo 0.00
 Packaging

402 2017-6-12

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

Work Order ID 162122

Friday, May 26, 2017 10:39:22 AM

162122

Page 2

Item ID: D5321-3

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Ring

Start Date: 5/29/2017 Start Qty: 40.00

40

Cust Item ID:

Required Date: 6/19/2017 Req'd Qty: 40.00

40

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

120

QC6- All purchased or subcontracted products

0.00

120

QC

Memo

0.00

Quality Control

DAS

38

9-89

JUN 13 2017

130

Identify as per dwg & Stock Location: 5H164

0.00

130

Packaging

Memo

0.00

Packaging

40

DAS

6

9-89

JUN 15 2017

140

QC21- Final Inspection - Work Order Release

0.00

140

QC

Memo

0.00

Quality Control

DAS
21
9-89

JUN 15 2017

17/6/19

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐			
Design ☐	☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐			
Doc/Data ☐	☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐			
Equip/Tooling ☐	☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐			
Handling/Pre ☐	☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐			
Material ☐	☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐			
Internal Transport ☐	☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐			
Tribal Knowledge ☐	☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐			
LOA ☐	☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐			
Substation ☐	☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐			
Past Expiry Date ☐	☐	Manufacturing Process ☐	OTHER :						
Misidentified ☐	☐	Past Due ☐							

Friday, May 26, 2017 10:39:21 AM

Page 1

162122

D5321-3

Required Qty: 40.00

Comments: IPP REV:A 15.10.13 NEW ISSUE DD VERF:JLM IPP
REV:B 16.03.28 AS PER DWG REV.B DD VERF:JLM

[illegible]

DQA: _____ Date: _____



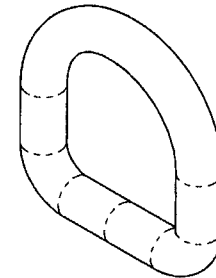
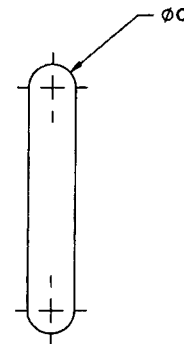
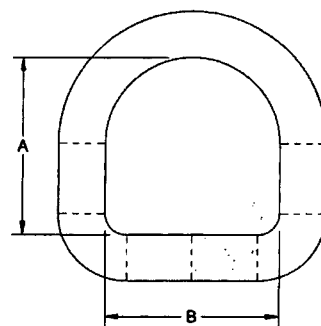
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

SPECIFICATION CONTROL DRAWING



MAY 26 2017
DAS
13
9-89

W/O. 162122

D5321-X RING

PART NUMBER	VENDOR	VENDOR P/N	BREAK STRENGTH	WORKING LOAD LIMIT	WEIGHT	DIM 'A'	DIM 'B'	DIM 'C'	MATERIAL
D5321-1	U.S.C.C.	MR15	6,000 lbs	2,000 lbs	0.22 lbs	1.50	1.45	0.39	ZINC PLATED STEEL
D5321-3	ANCRA	48557-11	5,000 lbs	1,666 lbs	0.09 lbs	1.50	1.50	0.25	CAD PLATED STEEL
D5321-5	MCMASTER-CARR	9372T21	600 lbs	200 lbs	0.05 lbs	0.81	1.06	0.22	NICKEL PLATED STEEL

△

NOTES:

- 1) MATERIAL: SEE TABLE
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.7
- 7) WEIGHT: SEE TABLE

B	ADD D5321-5	DB	16.02.08
A	NEW RELEASE	DB	15.09.30
REV.	DESCRIPTION	BY	DATE
DESIGN	DB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AK		
CHECKED	ML	DRAWING NO.	REV. B
MFG. APPR.	DD	D5321	SHEET 1 OF 1
APPROVED	WM	TITLE	SCALE
DE APPR.	DS	RING	NTS
DATE	16.02.08	COPYRIGHT © 2015 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

RELEASED
2016-03-23
2016-548

APPROVED



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO36456

Purchase Order Date 5/26/2017

PO Print Date 5/26/2017

Page Number 1 of 1

Order From :

VU-ANC001

Ship To : DART AEROSPACE LTD

ANCRA INTERNATIONAL, LLC
25591 NETWORK PLACE
CHICAGO, IL 60673-1255
US

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

E-MAILED
MAY 26 2017

Contact Name

Vendor Phone

Ship To Contact

Ship To Phone

Ship Via:

FedEx Overnight collect

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 30

Currency

USD

FOB

FCA - (Free Carrier)

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	48557-11 AS PER DWG D5321 REV. B B162122	Ring	6/8/2017 Yes 6/8/2017	FN	40.00 Each	\$6.95	\$278.00 DAS 38 9-89
Line Total:							\$278.00
2	71401-45 Procurement Quality Clauses A005 RIGHT OF ENTRY A016 PERSONNEL QUALIFICATION A026 CERTIFICATION OF MATERIAL CONFORMANCE A040 NOTIFICATION OF QUALITY ESCAPE A042 DART NOTIFICATION BY SUPPLIER A043 RETENTION OF QUALITY DOCUMENTS	PROCUREMENT QUALITY CLAUSES	6/8/2017 No 6/8/2017		1.00	\$0.00	\$0.00
Line Total:							\$0.00
PO Total:							\$278.00

SP7-6-12

[Signature]

Note: Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Change Nbr: 1

Change Date: 5/26/2017



ANCRA
INTERNATIONAL LLC

875 West 8th Street
Azusa, California 91702

Phone: (310) 973-5000 • FAX: (310) 973-1138

Shipping List Number 804896-1

Customer
Order

P036456

Order
Date

06-07-17

Page

1

Ship To: 100312
DART AEROSPACE LTD
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Canada

Bill To: 100312
DART AEROSPACE LTD
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Canada

Ship Via: FedEx Std Overnight Contact : CHANTAL LAVOIE
Ship from: W ANCRA WEST AZUSA Freight Terms : COL

Ord Ent By: DJohnson

Ln	Item	Description	Sell UM	Sell QtyShip....	To Stk UM	Bin Loc	Stock Qty To Ship	Shipped Qty/UM
1	48557-11	Facility W :D-RING- 1 1/2"	EA	40	EA	4R05	40	40
Cust PN: 71900-90								
Rev. Level: G								
** Line Item Comments **								
MARK LOT NUMBER: C021260P								
** Special Instructions **								
SHIP FEDEX STD OVERNIGHT								
ACCOUNT:								
Allocated: 06-08-17								
Printed: 06-08-17 07:53:11								

5077-6-12

DAS
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1-89



ANCRA
INTERNATIONAL LLC

875 West 8th Street
Azusa, California 91702

Phone: (310) 973-5000 • FAX: (310) 973-1138

Shipping List Number 804896-1

Customer
Order

P036456

Order
Date

06-07-17

Page

2

Ship To: 100312
DART AEROSPACE LTD
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Canada

Bill To: 100312
DART AEROSPACE LTD
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Canada

Ship Via: FedEx Stnd Overnight
Ship from: W ANCRA WEST AZUSA

Contact : CHANTAL LAVOIE

Freight Terms : COL

Ord Ent By: DJohnson

Ln	Item	Description	Sell UM	Sell QtyShip...	To Stk UM	Bin Loc	Stock Qty To Ship	Shipped Qty/UM
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CERTIFICATE OF CONFORMANCE

WE HEREBY CERTIFY THAT THE ABOVE STATED PART NUMBERS REPRESENTED ARE NEW AND HAVE BEEN MANUFACTURED AND INSPECTED IN ACCORDANCE WITH OUR QUALITY ASSURANCE MANUAL, ALL RELEVANT DRAWINGS, SPECIFICATIONS, PURCHASE ORDER REQUIREMENTS, AND LEGIBLY MARKED IN ACCORDANCE WITH FAR 45.15, IF APPLICABLE.

ALL CHEMICAL, PHYSICAL OR FUNCTIONAL TEST REPORTS RELEVANT TO THE CERTIFICATION OF CONFORMANCE ARE ON FILE IN OUR QUALITY ASSURANCE OFFICE.

INSPECTOR

DATE 06/08/2017

Shortage Claim Policy

Ancra customer is responsible for inspecting incoming shipments. Ancra must be notified within fifteen(15) days of receipt of shipment if material is not as ordered, quantity is either surplus or short, or if any damage has occurred in shipment. No claims submitted to Ancra will be accepted after fifteen(15) days of receipt.

Pay
Terms

NET 30

DAS
38

3-89

SECRETARY OF THE ARMY, WASHINGTON, D.C.

THE INFORMATION CONTAINED HEREIN IS UNCLASSIFIED
DATE 07-18-2009 BY 60322 UCBAW/SJS/KSP

INDEX

DN 15

DECLASSIFICATION OF DOCUMENTS ARE ON E-2 OR ORK DOWNGRADE TO "CONFIDENTIAL"
AT DISCRETION OF DIRECTOR OF INFORMATION REGISTRATION DEPT. BEFORE REFERRAL TO THE
NATIONAL ARCHIVES

RECORDS AND PERIODICALS ARE IN ACCORDANCE WITH THE "NATIONAL ARCHIVES"
RECORDS MANAGEMENT ACT BEFORE REFERRAL TO THE NATIONAL ARCHIVES. RECORDS ARE
AND HAVE BEEN RECLASSIFIED AND INDEXED IN ACCORDANCE WITH THE "NATIONAL
ARCHIVES" ACT. THE ABOVE STATED HAVE BEEN RECLASSIFIED AND INDEXED

CONFIDENTIAL - SECURITY INFORMATION

[illegible][illegible]

generated F(1, 14) = 26.64, $p < .001$, $\eta^2 = .66$.